AMENDMENTS TO THE CLAIMS

1. (Currently amended) A substrate processing apparatus, comprising:

a reaction container which accommodates a substrate, to which a plurality of reaction gases are supplied, and which forms a space where said substrate is subjected to desired processing,

an exhaust port which is opened in said reaction container for exhausting gas from said reaction container,

a gas supply system for supplying at least the plurality of reaction gases to said reaction container, and

a controller for controlling the gas supply system;

wherein

said gas supply system comprises:

a plasma generating device including a plasma introducing nozzle portion and a gas introducing nozzle portion, the plasma introducing nozzle portion and the gas introducing nozzle portion mounted in the space where said substrate is subjected to desired processing,

a cleaning gas supply system for supplying cleaning gas which removes accretion adhering to an inner side of said reaction container by subjecting said substrate to the desired processing,

a post-processing gas supply system for supplying post-processing gases,

said post-processing gas supply system includes exclusive supply nozzles for independently supplying each of the reaction gases,

said post-processing gases include all reaction gases used when said substrate is subjected to the desired processing;

said controller controls said post-processing gas supply system to supply all of said post-processing gases to said reaction container after the cleaning gas is supplied to said container and before the substrate is placed in the container, and wherein

said controller controls the post-processing gas supply system to supply all of the reaction gases alternately from the exclusive supply nozzles to form multiple layers on reaction container surfaces prior to processing a substrate.

2. (Canceled)

3. (Previously presented) A substrate processing apparatus as recited in claim 1, wherein each of the reaction gases supplied from said post-processing gas supply system removes the element remaining in said exclusive supply nozzles and said reaction container, and the reaction gases form a desired film in said reaction container.

4. (Previously presented) A substrate processing apparatus as recited in claim 3, wherein the plurality of reaction gases supplied from the exclusive supply nozzles are a gas including silicon, and ammonia gas activated by the plasma generating device.

5. (Original) A substrate processing apparatus as recited in claim 4, wherein the cleaning gas is a gas including fluorine, and the gas including fluorine is supplied from the exclusive supply nozzle which supplies a gas including silicon.

6. (Original) A substrate processing apparatus as recited in claim 4 or 5, wherein the gas including silicon is SiH_2Cl_2.

7. (Original) A substrate processing apparatus as recited in claim 5, wherein the gas including fluorine is NF_3 or ClF_3.

8. (Currently amended) A substrate processing apparatus which supplies a plurality of reaction gases alternately and forms a thin film on a substrate, comprising:

a reaction container,

a plurality of exclusive supply nozzles for respectively and exclusively supplying the plurality of the reaction gases,

a plasma producing unit including a plasma introducing nozzle portion and a gas introducing nozzle portion, the plasma introducing nozzle portion and the gas introducing nozzle

portion mounted in a space where said substrate is subjected to desired processing, and

a control apparatus for controlling the substrate processing apparatus such that cleaning gas is supplied from one of the supply nozzles into said reaction container at the time of cleaning, all reaction gases used for processing a substrate are alternately supplied into said reaction container from the exclusive supply nozzles after the cleaning gas is supplied and before the substrate is processed to form multiple layers on reaction container surfaces after cleaning and prior to placing and processing a subsequent substrate.

9. (Previously presented) A substrate processing apparatus as recited in claim 8, further comprising a heating unit which heats an interior of said reaction container, wherein

a temperature in the reaction container when the plurality of reaction gases are supplied after the cleaning gas is supplied and before a substrate is processed, is set lower than a temperature in the reaction container when the cleaning is carried out.

10. (Previously presented) A substrate processing apparatus as recited in claim 9, wherein the plasma producing unit excites reaction gas with plasma, wherein

at least one of the plurality of reaction gases is excited with plasma by said plasma producing unit and is supplied from said supply nozzle.

11. (Withdrawn) A substrate processing method, comprising:

providing a reaction container for accommodating a substrate, the reaction container forming a space where the substrate is subjected to desired processing using a first reaction gas and a second reaction gas;

providing an exhaust port in said reaction container for exhausting gas from said reaction container;

providing a gas supply system for supplying the first reaction gas and the second reaction gas and a cleaning gas to said reaction container;

providing a controller for controlling the gas supply system;

subjecting the substrate to desired processing using the first reaction gas and the

second reaction gas;

removing the processed substrate from the reaction container;

supplying the cleaning gas to the reaction container;

exhausting the cleaning gas from the reaction container;

before processing an additional substrate, supplying the first reaction gas to the reaction container;

exhausting the first reaction gas from the reaction container; and

supplying the second reaction gas to the reaction container.

12. (Withdrawn) The method of claim 11 wherein said step of providing a gas supply system for supplying the first reaction gas and the second reaction gas and a cleaning gas to said reaction container comprises the steps of providing a first supply nozzle for supplying the first reaction gas and providing a second supply nozzle for supplying the second reaction gas independently of the first reaction gas.

13. (Withdrawn) The method of claim 12 wherein said step of supplying the first reaction gas comprises the step of supplying a reaction gas including silicon.

14. (Withdrawn) The method of claim 12 wherein said step of supplying the second reaction gas comprises the step of supplying a reaction gas including silicon.

15. (Withdrawn) The method of claim 13 or 14 wherein said step of supplying the cleaning gas comprises the step of supplying a cleaning gas including fluorine.

16. (Currently amended) A substrate processing apparatus, comprising:

a reaction container which accommodates a substrate, to which a plurality of reaction gases are supplied, and which forms a space where said substrate is subjected to desired processing and the space includes a plasma introducing nozzle portion,

an exhaust port which is opened in said reaction container for exhausting gas from said

reaction container,

a gas supply system for supplying at least the plurality of reaction gases to said reaction container, and

a controller for controlling the gas supply system; wherein said gas supply system comprises:

a cleaning gas supply system for supplying cleaning gas which removes accretion adhering to an inner side of said reaction container by subjecting said substrate to the desired processing,

a post-processing gas supply system including supply nozzles for independently supplying each of the reaction gases used when said substrate is subjected to the desired processing, and at least some of said supply nozzles being located within the plasma introducing nozzle portion;

said controller controlling said post-processing gas supply system to supply all of the reaction gases alternately from the supply nozzles to said reaction container after the cleaning gas is supplied to said container and before the substrate is placed in the container to form multiple layers on a reaction container surface.